

Abstract

Optically pumped, radiation-emitting semiconductor device, and method for fabricating it

The invention describes an optically pumped, radiation-emitting semiconductor device having a semiconductor body which includes at least one pump radiation source (20) and a surface-emitting quantum well structure (11), the pump radiation source (20) and the quantum well structure (11) being monolithically integrated. The pump radiation source (20) generates pump radiation (2) for optically pumping the quantum well structure (11), a recess (10) for introducing the pump radiation (2) in the quantum well structure (9) being formed in the semiconductor body between the pump radiation source (20) and the quantum well structure (11). Furthermore, the invention describes a method for fabricating a semiconductor device of this type.

Figure 1a